

Title (en)

Synthesis of metal bis-triflimide compounds and methods for purification thereof

Title (de)

Synthese von Metall-Bistriflimid-Verbindungen und Reinigungsverfahren dafür

Title (fr)

Synthèse de composés métalliques bis-triflimide et leurs méthodes de purification

Publication

EP 1857432 A3 20080514 (EN)

Application

EP 07010851 A 20020312

Priority

- EP 02706922 A 20020312
- GB 0106001 A 20010312
- GB 0106000 A 20010312

Abstract (en)

[origin: WO02072260A2] A metal bis-triflimide compound having the formula: [M>x<]n+>[(N(SO₂CF₃)₂)(nx-yz)]<(nx-yz)->[Ly]<z-> where M is a metal selected from the metals in groups 5 to 10, 12 and 14 to 16 and Cu, Au, Ca, Sr, Ba, Ra, Y, La, Ac, Hf, Rf, Ga, In, Tl, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Lu, and the actinides; L is a negative or neutral ligand; n is 2, 3, 4, 5, 6, 7 or 8; x is greater than or equal to 1; y is 0, 1, 2, 3, 4, 5, 6, 7 or 8; and z is 0, 1, 2, 3 or 4. Another aspect of the specification is a process for carrying out an electrophilic substitution reaction of an aromatic ring or an isomerisation, polymerisation or rearrangement to a chemical compound or molecule using said compound.

IPC 8 full level

B01J 31/12 (2006.01); **C07C 45/46** (2006.01); **B01J 31/02** (2006.01); **B01J 31/22** (2006.01); **B01J 31/40** (2006.01); **C07B 61/00** (2006.01); **C07C 2/08** (2006.01); **C07C 2/26** (2006.01); **C07C 2/66** (2006.01); **C07C 5/27** (2006.01); **C07C 11/02** (2006.01); **C07C 13/28** (2006.01); **C07C 15/02** (2006.01); **C07C 45/54** (2006.01); **C07C 49/784** (2006.01); **C07C 49/807** (2006.01); **C07C 49/83** (2006.01); **C07C 49/84** (2006.01); **C07C 315/04** (2006.01); **C07C 317/14** (2006.01); **C07F 1/08** (2006.01); **C07F 3/00** (2006.01); **C07F 3/02** (2006.01); **C07F 3/04** (2006.01); **C07F 3/06** (2006.01); **C07F 5/00** (2006.01); **C07F 5/06** (2006.01); **C07F 7/22** (2006.01); **C07F 7/24** (2006.01); **C07F 7/28** (2006.01); **C07F 11/00** (2006.01); **C07F 13/00** (2006.01); **C07F 15/00** (2006.01); **C23C 14/06** (2006.01)

CPC (source: EP KR US)

B01J 31/0222 (2013.01 - EP US); **B01J 31/0227** (2013.01 - EP US); **B01J 31/0252** (2013.01 - EP US); **B01J 31/0271** (2013.01 - EP US); **B01J 31/0278** (2013.01 - EP US); **B01J 31/0284** (2013.01 - EP US); **B01J 31/0287** (2013.01 - EP US); **B01J 31/26** (2013.01 - EP US); **B01J 31/34** (2013.01 - EP US); **B01J 31/4015** (2013.01 - EP US); **C07F 19/00** (2013.01 - KR); **B01J 2231/323** (2013.01 - EP US); **B01J 2231/4205** (2013.01 - EP US); **B01J 2231/52** (2013.01 - EP US); **B01J 2531/23** (2013.01 - EP US)

Citation (search report)

- [X] WO 9723448 A1 19970703 - MINNESOTA MINING & MFG [US]
- [X] JP H07246338 A 19950926 - CENTRAL GLASS CO LTD
- [Y] JP H09176171 A 19970708 - NOGUCHI KENKYUSHO, et al
- [Y] JP H09188683 A 19970722 - CENTRAL GLASS CO LTD
- [X] WO 9821197 A2 19980522 - HOFFMANN LA ROCHE [CH]
- [E] EP 1201634 A1 20020502 - CELANESE CHEM EUROPE GMBH [DE]
- [A] WO 9937655 A1 19990729 - ADVANCED TECH MATERIALS [US]
- [Y] MIKAMI, KOICHI ET AL: "Synthesis, structure and high catalytic activity in the Diels-Alder reaction of ytterbium(III) and yttrium(III) bis(trifluoromethanesulfonyl)amide complexes", INORGANIC CHEMISTRY COMMUNICATIONS (1998), 1(1), 10-11 CODEN: ICCOPF; ISSN: 1387-7003, 1998, XP002456657
- [Y] STRAUSS ET AL: "Cu(CO)₂(N(SO₂CF₃)₂). The first structurally characterized copper (I) polycarbonyl", ORGANOMETALLICS, vol. 18, no. 19, 13 September 1999 (1999-09-13), pages 3769 - 3771, XP002456658
- [X] YAMAMOTO ET AL: "Aluminum Bis(trifluoromethylsulfonyl)amides: New highly efficient and remarkably versatile catalysts for C-C bond formation reactions", ANGEW. CHEM. INT. ED., vol. 39, no. 1, 2000, pages 178 - 181, XP002474034
- [X] MIKAMI K ET AL: "Lanthanide bis(trifluoromethanesulphonyl)amides as a new type of asymmetric catalysts for hetero Diels-Alder reaction with Danishefsky's diene in the presence of water", SYNLETT, THIEME INTERNATIONAL, STUTTGART, DE, vol. 95, no. 9, September 1995 (1995-09-01), pages 975 - 977, XP002131414, ISSN: 0936-5214
- [X] GRIECO P A ET AL: "Magnesium trifluoromethanesulfonimide(triflimide) promoted substitution reactions of allylic and benzylic acetates. Magnesium triflimide as a substitute for magnesium perchlorate", 14 April 1997, TETRAHEDRON LETTERS, ELSEVIER, AMSTERDAM, NL, PAGE(S) 2645-2648, ISSN: 0040-4039, XP004058294

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

Designated extension state (EPC)

AL LT LV MK RO SI

DOCDB simple family (publication)

WO 02072260 A2 20020919; WO 02072260 A3 20040226; AT E370786 T1 20070915; AU 2002238707 A1 20020924; AU 2002241085 B2 20070329; BR 0208094 A 20040302; CA 2440937 A1 20020919; CA 2440942 A1 20020919; CN 1328254 C 20070725; CN 1507371 A 20040623; DE 60221991 D1 20071004; DE 60221991 T2 20080515; EP 1370508 A2 20031217; EP 1414568 A2 20040506; EP 1414568 B1 20070822; EP 1857432 A2 20071121; EP 1857432 A3 20080514; ES 2292722 T3 20080316; JP 2004528306 A 20040916; JP 2004531492 A 20041014; JP 4365584 B2 20091118; KR 20030093236 A 20031206; PT 1414568 E 20071204; US 2004138433 A1 20040715; US 2004171895 A1 20040902; US 6998497 B2 20060214; US 7781625 B2 20100824; WO 02072519 A2 20020919; WO 02072519 A3 20021121

DOCDB simple family (application)

GB 0200989 W 20020312; AT 02706922 T 20020312; AU 2002238707 A 20020312; AU 2002241085 A 20020312; BR 0208094 A 20020312; CA 2440937 A 20020312; CA 2440942 A 20020312; CN 02809421 A 20020312; DE 60221991 T 20020312; EP 02704905 A 20020312; EP 02706922 A 20020312; EP 07010851 A 20020312; ES 02706922 T 20020312; GB 0200988 W 20020312; JP 2002571212 A 20020312; JP 2002571437 A 20020312; KR 20037011956 A 20030909; PT 02706922 T 20020312; US 47125704 A 20040225; US 47125904 A 20040422